POLITICAL NETWORKS
Government 319 001 (CRN: 15607)
George Mason University
Monday & Wednesday 1:30pm – 2:45pm
Robinson Hall B 106
Spring 2017

Professor: Jennifer Nicoll Victor, Ph.D.
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Office: Robinson Hall-A 232
Office Hours: Mondays & Wednesdays 10:30am – 12:00pm, or by appointment
Course Website: Available for enrolled students at http://blackboard.gmu.edu

Teaching Assistant: Aubrey Grant, agrant12@gmu.edu
Office Hours: Sundays, 3:00 – 5:00pm, on-line (Blackboard Discussion Group)

Schar School Main Office: Robinson Hall-A, 201

I. Course Description

The study of networks, connections, or relationships in politics is intuitive. In this course we learn the theory, methods, and applications of a systematic study of networks in politics. For many decades the study of politics has been dominated by studying individuals and institutions. In this course, we challenge the basic assumptions of those individualistic approaches and look at specific cases where it may be unreasonable to assume that people or events are independent of one another. The course is interdisciplinary, drawing strongly from sociology, statistics, and computer science. Networks are a ubiquitous feature of the natural and social world and we will draw upon examples and lessons from many fields, from genetics to anthropology, to understand how networks operate in politics. The course covers theories of social network analysis and applies them to questions of politics. To do so, we will also apply methodological tools and software to social network data. The course is introductory and provides somewhat of a survey of the field. Students are not required to have a quantitative background, but those who have previous experience with statistics or data analysis may have an advantage in becoming familiar with the techniques.

II. Course Objectives

I have three broad objectives for this course. First, students will learn the fundamental theoretical and methodological concepts in social network analysis as it relates to politics. Second, students will learn basic network analytical skills and develop the ability to use basic tools in at least one software program. This will include best practices for gathering and managing network data. Third, I aim to stimulate students’ curiosity about politics and creative means of studying questions pertinent to modern problems and interests.
III. Teaching Philosophy and Teaching Style

My teaching philosophy is based on three primary principles.

- First, I believe the gap between undergraduate and graduate coursework in political science is too broad. I therefore introduce advanced theoretical concepts in undergraduate classes so that students understand the true value of studying politics as a science; moreover, should any student choose to pursue advanced or graduate work in political science, they will be well prepared.

- Second, I believe in incorporating current events into classroom lessons. Nothing in science seems concrete until one can “see it with their own eyes.” Reading a daily newspaper and following current events, then applying theoretical concepts to political happenings helps to clarify theoretical concepts and demonstrate their utility.

- Third, as this class has a significant practical component, I intend to provide ample opportunities for students to practice techniques in and out of class using exercises and other pedagogical devices. It will be important for students to remain active with the activities and to engage in practice with the software and techniques. Learning is an active, not passive, process.

- Finally, as an instructor and a leader of class discussions on everything from lawmaking to elections, I aim to remain politically neutral and non-partisan. Students should learn to collect and evaluate information on their own. I would not want students who disagree with my political views to hear all course information with a skeptical ear; nor would I want students who tend to agree with my views to accept everything I say at face value. I encourage students to express their views, be critical, and challenge information when it is appropriate.

My teaching style is consistent with my philosophy. I use a Socratic-style in the classroom in which I frequently ask questions and encourage an interactive learning experience. I do my best to learn students’ names, encourage participation, and create, what I hope is, an open learning environment where students feel free to question, comment, and explain how they view course content. Such an environment helps to foster student interaction, thinking, and analytical and creative skills. Moreover, while lectures are important because they help to distribute necessary information and facts, they are not usually the most effective way to learn information. For this reason, we will do a variety of activities in the classroom. Successful performance in this course will include classroom participation and working in and out of class with your peers.

IV. Student Responsibilities

A. Class Attendance and Participation. Learning is an active, rather than passive, exercise. Accordingly, every student is expected to attend class as well as be prepared to ask questions about and comment on the readings. You need to complete the daily reading assignment prior
to the class meeting. You will be much more successful in this class if you attend regularly, take
notes, pay attention, and participate.

B. Readings. As is the case with attendance, keeping pace with the reading is essential to
succeeding in this class. It is your responsibility to obtain copies of the readings prior to the
date we will discuss them in class. I will do everything I can to make this task easier for you.
You will be much more successful in this course if you complete the assigned readings and take
notes on them.

C. Technology The use of laptop computers, tablets (such as iPads), and smart phones is
prohibited in class, except when instructed to do so. The costs associated with electronic
distractions, to you and those around you, outweigh the benefits of immediate supplementary
classroom information. Students may use specific instructional applications, such as
Blackboard, only when instructed to do so. However, students may not use laptops or other
devices on a general basis in this class. If these restrictions pose a challenge for you, please
discuss it with me. For more information on the benefits of taking notes by hand, see this.

D. Cheating, Plagiarism, and Academic Integrity. Students in this course will be expected
to comply with the George Mason University Honor Code (see http://honorcode.gmu.edu/).
There are three simple guidelines to follow with respect to academic integrity: (1) all work you
submit must be your own; (2) when using the work or ideas of others, including fellow students,
give full credit through accurate citations; and (3) if you are uncertain about the expectations
for any assignment, ask for clarification. Any student engaged in any academic misconduct will receive an F on the offending exam or assignment. Egregious violations will result in an F grade
for the course and will be reported to the appropriate Dean’s office. These violations include
cheating on an exam, using someone else’s work as your own, and plagiarizing the written
word. Plagiarism (using someone else’s words or ideas without providing credit or citation) is a
serious offense. If you have any questions at all about what constitutes cheating, plagiarism, or
academic misconduct, please ask the instructor.

E. Students with Disabilities. If you have a disability for which you are or may be
requesting an accommodation, please let me (the instructor) know and contact the Office of
Disability Services (ODS) at (703) 993-2474 or http://ods.gmu.edu. All discussions with me
regarding disabilities are confidential.

V. Course Requirements and Graded Evaluation

There are four graded requirements for this course, described below. Grades will be calculated
on a non-curved typical A-F scale where,

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<tr>
<th>Percentage</th>
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<tbody>
<tr>
<td>93-100</td>
<td>A</td>
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<tr>
<td>90-92</td>
<td>A-</td>
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<tr>
<td>87-89</td>
<td>B+</td>
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<td>77-79</td>
<td>C+</td>
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<td>67-69</td>
<td>D+</td>
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<td>&lt; 60</td>
<td>F</td>
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<tr>
<td>83-86</td>
<td>B</td>
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<tr>
<td>73-76</td>
<td>C</td>
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<tr>
<td>63-66</td>
<td>D</td>
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<td>80-82</td>
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<td>70-72</td>
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<td>60-62</td>
<td>D-</td>
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Problem Set Assignments (20%) There will be weekly exercises for students to complete. Most of these will be able to be completed on-line or completed through a software program (UCInet) and submitted on-line. Details on these assignments will be presented in class and on Blackboard.

Midterm Exam (25%) This will be an in-class exam covering material from the first half of the course. The exam will include multiple choice, short answer, and analytical (homework style) questions based on material presented in class and in the readings. A study guide will be posted on-line no later than one-week before the exam. The midterm will be in-class on Wednesday, March 8.

Project/Term Paper (25%) Each student will complete a term paper that includes an analytical project. In these projects students will use one of several suggested datasets and demonstrate ability to apply analytical concepts to original questions relating to the dataset of choice. Papers will be 8-10 pages in length, use proper citations, and engage an original question that is approached with theoretical and analytical creativity.

Final Exam (30%). This will be an in-class exam covering material from the entire course (comprehensive), though concentrating on material from the last half of the course. The exam will include identifications, short answers, and analytical questions based on class exercises, material presented in class, and in the readings. A study guide will be posted on-line no later than one-week before the exam. The exam will be administered during the regular final exam scheduled time for our class on Wednesday, May 10, 2017 at 1:30pm – 4:15pm. This is the ONLY time to take the exam.

VI. Policies on late work, make-ups and extra credit

A. Can I submit an assignment late? Students may submit an assignment after its due date for a 5% (off the total possible score) penalty per-24-hour period that the assignment is late.

B. What if I miss an exam? Make-up exams are only given in the case of verified illness or family emergency, such as a death in the family. Documentation is necessary to receive a qualified make-up examination. Students who arrive late to an in-class exam may still sit for the exam if no other student has already submitted their exam; once a single student hands-in their exam, no others may begin the exam.

C. Do you offer extra credit? No.

D. What can I do if I perform poorly on an assignment? Students who receive a 72% or less on a homework assignment or essay (not exam) may re-do the assignment for a replacement grade. Re-do assignments are subject to a 5% per day penalty starting from the day graded assignments were returned to students in class (regardless of
VII. Texts

The reading assignments are chosen to buttress and expand on the analytic foundation laid in class. Please notify the instructor about problems obtaining the readings as soon as possible. The following materials are required and can be found at the campus bookstore.


http://faculty.ucr.edu/~hanneman/nettext/.


VIII. Software

Students need to purchase UCInet software for network analysis. More information is available here: https://sites.google.com/site/ucinetsoftware/home
A student license is $40. A 90-day free trial is available, but will not cover the whole semester.

IX. Course Schedule and Reading Assignments

Mon., Jan. 23

**INTRODUCTION TO THE COURSE AND THE STUDY OF NETWORKS IN POLITICS**

**PART I: FOUNDATIONS AND TOOLS**

Wed., Jan. 25

**DEVELOPING INTUITIONS**
Barabasi, Ch. 1
Barabasi, Ch. 2
Christakis & Fowler, Preface & Ch. 1
Mon., Jan. 30  **FUNDAMENTAL COMPONENTS OF A NETWORK**  
Borgatti, et al., Ch. 1 (pp. 1-10)  
Hanneman and Riddle, Preface  
Hanneman and Riddle, 2. Why formal methods?  
Patty, John and Maggie Penn, “Network Theory and Political Science,” (2016) in  
Oxford Handbook of Political Networks, Victor, Montgomery, & Lubell, eds.  
AVAILABLE ON BLACKBOARD.

Wed., Feb. 1  **MATHEMATICAL FOUNDATIONS OF GRAPH THEORY**  
Borgatti, et al., Ch. 2 (pp. 11-18)  
Hanneman and Riddle, 1. Social Network Data  
Hanneman and Riddle, 5. Matrices

Mon., Feb. 6  **SOFTWARE INTRODUCTION AND DEMONSTRATION**  
Borgatti, et al., Ch. 2 (pp. 18-23)  
Hanneman and Riddle, 6. Working with Data  
Gross, Justin H. and Joshua Jansa, “Relational Concepts, Measurement, and Data”  
(2016) in Oxford Handbook of Political Networks, Victor, Montgomery, &  
Lubell, eds. AVAILABLE ON BLACKBOARD.

Wed., Feb. 8  **SOCIAL NETWORK RESEARCH DESIGN AND DATA COLLECTION**  
Borgatti, et al., Ch. 3  
Borgatti, et al., Ch. 4

Mon., Feb. 13  **WORKING WITH NETWORK DATA**  
Borgatti, et al., Ch. 5

Wed., Feb. 15  **FINDING NETWORKS**  
Christakis & Fowler, Ch. 2  
Christakis & Fowler, Ch. 3

Mon., Feb. 20  **IT’S A SMALL WORLD, AFTER ALL**  
Barabasi, Ch. 3  
Barabasi, Ch. 4

Wed., Feb. 22  **THE UBIIQUITY OF NETWORKS**  
“Connected: The Power of Six Degrees,” a documentary film by Annamaria Talas  
(2009). We will watch this movie in class on this day.  
Barabasi, Ch. 5  
Barabasi, Ch. 6  
Christakis & Fowler, Ch. 4  
Christakis & Fowler, Ch. 5
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| Mon., Feb. 27 | **VISUALIZATION OF NETWORK DATA**  
Borgatti, et al., Ch. 7  
| Wed., Mar. 1   | **VISUALIZATION OF NETWORK DATA, II**  
Hanneman and Riddle, 3. Graphs  
Hanneman and Riddle, 4. Netdraw |
| Mon., Mar. 6  | **IN-CLASS MIDTERM EXAM REVIEW**                                      |
| Wed., Mar. 8  | **MIDTERM EXAM**                                                      |
|              | **Spring Break**                                                      |
|              | **March 13-17, 2017**                                                 |
|              | **Part II: Network Properties & Applications**                        |
| Mon., Mar. 20 | **THE WHOLE ENCHILADA**  
Borgatti, et al., Ch. 9 (Cohesion, density, reciprocity, transitivity, clustering)  
Christakis & Fowler, Ch. 9 |
| Wed., Mar. 22 | **CENTRALITY AND POWER**  
Borgatti, et al., Ch. 10  
Hanneman & Riddle, Ch. 10 |
| Mon., Mar. 27 | **NETWORK APPLICATIONS: PHYSICS AND POLITICS**  
Barabasi, Ch. 7  
Barabasi, Ch. 8  
Christakis & Fowler, Ch. 6 |
| Wed., Mar. 29 | **CONNECTIVITY**  
Hanneman & Riddle, Ch. 7 |
| Mon., Apr. 3  | **OUR CONNECTED WORLD**  
Christakis & Fowler, Ch. 7  
Christakis & Fowler, Ch. 8 |
| Wed., Apr. 5  | **NETWORK POSITIONS**  
Hanneman & Riddle, Ch. 8 (Embedding) |
| Mon., Apr. 10 | **SUBGROUPS**  
Borgatti, et al., Ch. 11 |
**Wed., Apr. 12**  
**Cliques and Clusters**  
Hanneman & Riddle, Ch. 11

**Mon., Apr. 17**  
**Networks in American Politics: Institutions I**  
Koger, Gregory, Seth E. Masket, and Hans Noel, “American Political Parties as Networks,” (2016) in *Oxford Handbook of Political Networks*, Victor, Montgomery, & Lubell, eds. AVAILABLE ON BLACKBOARD.

**Wed., Apr. 19**  
**Networks in American Politics: Institutions II**  
Box, Steffensmeier, Janet, and Dino Christensen, “Judicial Networks,” (2016) in *Oxford Handbook of Political Networks*, Victor, Montgomery, & Lubell, eds. AVAILABLE ON BLACKBOARD.  

**Mon., Apr. 24**  
**Networks in American Politics: Political Behavior**  
Rolfe, Meredith and Stephanie Chan, “Voting and Participation,” (2016) in *Oxford Handbook of Political Networks*, Victor, Montgomery, & Lubell, eds. AVAILABLE ON BLACKBOARD.  
Santoro, Lauren Ratliff and Paul Beck, “Social Networks and Vote Choice” (2016) in *Oxford Handbook of Political Networks*, Victor, Montgomery, & Lubell, eds. AVAILABLE ON BLACKBOARD.

**Wed., Apr. 26.**  
**Networks in Ubiquity (reprise)**  
Barabasi, Chs. 9-14

**Mon., May 1**  
**Advanced Network Topics (or in-class workshop)**  
Borgatti, et al., Ch. 12 (Equivalent Networks)  
Hanneman & Riddle, 12. Equivalence  
Hanneman & Riddle, 13. Similarity and Structural Equivalence

**Wed., May 3**  
**Advanced Network Topics (or in-class review)**  
Borgatti, et al., Ch. 13 Two-mode networks  
Hanneman & Riddle, 17. Two-mode networks  
Borgatti, et al., Ch. 14 Large networks  
Hanneman & Riddle, 16. Multiplex  
Borgatti, et al., Ch. 6 (multivariate analysis)
Borgatti, et al., Ch. 8 (hypothesis testing)

Mon., May 15  FINAL EXAM 1:30PM – 4:15PM